

INFORMATION DISCLOSURE STATEMENT

<p style="text-align: center;">U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)</p> <p style="text-align: center;">Date Submitted to PTO: April 11, 2005</p>			ATTY DOCKET NO. 2000_1391		SERIAL NO. 09/680,177		
			APPLICANT Mitsuaki OSHIMA et al.				
			FILING DATE October 5, 2000		GROUP 2634		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
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	AG						
	AH						
	AI						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AJ						
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	AN						
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
<i>DH</i>	AO	J. A. C. Bingham, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come", IEEE Communications Magazine, Vol. 28, May 1990, pages 5-8 and 11-14					
<i>DH</i>	AP	B. Hirosaki, "An Orthogonally Multiplexed QAM System Using the Discrete Fourier Transform", IEEE Transactions on Communications, Vol. Com-29, No. 7, July 1981, pages 982-989					
<i>DH</i>	AQ	L. J. Cimini, Jr., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing", IEEE Transactions on Communications, Vol. Com-33, No. 7, July 1985, pages 665-675 and Annex					
EXAMINER	<i>Danville</i>			DATE CONSIDERED	08/18/05		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: February 23, 2005

ATTY DOCKET NO.
2000_1391SERIAL NO.
09/680,177APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
October 5, 2000FEB 23 2005
PATENT & TRADEMARK OFFICE
GROUP
2634

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DA	AA	3,959,726	5-25-76	Hinoshita et al.	—	—	—
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	
	AP	
	AQ	

EXAMINER

I. D. Bell

DATE CONSIDERED

08/17/05

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FORM PTO 1449 (modified)			ATTY DOCKET NO. 2000_1391	SERIAL NO. 09/680,177			
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			APPLICANT Mitsuaki OSHIMA et al.				
LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)			FILING DATE October 5, 2000	JAN 31 2005 GROUP 2634			
Date Submitted to PTO: January 31, 2005			U.S. PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>DH</i>	AA	3,824,548	7-16-74	Sullivan et al.	—	—	—
	AB	4,303,939	12-1-81	Stephens et al.	—	—	—
	AC	4,303,941	12-1-81	Marti et al.	—	—	—
	AD	4,309,726	1-5-82	Tanaka et al.	—	—	—
	AE	4,535,352	8-85	Haskell	—	—	—
	AF	4,564,858	1-14-86	Resch	—	—	—
	AG	4,581,639	4-8-86	Judge	—	—	—
	AH	4,769,819	9-6-88	Matsutani et al.	—	—	—
<i>DH</i>	AI	4,794,447	12-27-88	Tsinberg	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
<i>DH</i>	AJ	3-48587	3-1-91	Japan	—	—	abstract
	AK						
	AL						
	AM						
	AN						
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
<i>DH</i>	AO	Masafumi SAITO et al., "Bit Error Rate Characteristics of OFDM in Multipath Environment", 1991					
<i>DH</i>	AP	Ryutaro OHMOTO et al., " $\pi/4$ -shift QPSK Subcarrier Transmission", 1991					
	AQ						
EXAMINER	<i>D. Lilla</i>			DATE CONSIDERED <i>08/17/05</i>			

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Mitsuaki OSHIMA et al.LIST OF REFERENCES CITED BY APPLICANT(S)
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Date Submitted to PTO: January 31, 2005

FILING DATE
October 5, 2000 JAN 31 2005GROUP
2634

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	4,800,426	1-24-89	Glenn	—	—	—
	AB	4,817,192	3-28-89	Phillips et al.	—	—	—
	AC	5,007,088	4-9-91	Ooi et al.	—	—	—
	AD	5,029,003	7-91	Jonnalagadda	—	—	—
	AE	5,134,464	7-28-92	Basile et al.	—	—	—
	AF	5,181,112	1-19-93	Citta et al.	—	—	—
	AG	5,377,051	12-27-94	Lane et al.	—	—	—
	AH	5,400,084	3-21-95	Scarpa	—	—	—
DH	AI	5,576,902	11-19-96	Lane et al.	—	—	—

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EXAMINER

D. Schellhaas

DATE CONSIDERED

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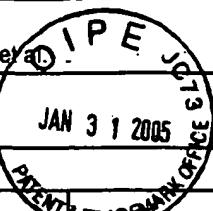
Date Submitted to PTO: January 31, 2005

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U.S. PATENT DOCUMENTS



*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DA	AA	5,598,220	1-97	Citta et al.	—	—	—
DA	AB	5,802,241	9-1-98	Oshima	—	—	—
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	AD						
	AE						
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	AI						

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